INL News Release FOR IMMEDIATE RELEASE July 21, 2009

**NEWS MEDIA CONTACTS:** 

Keith Arterburn, 208-351-2999, <u>keith.arterburn@inl.gov</u> John Lindsay, 208-526-9078, <u>john.lindsay@inl.gov</u>

## INL wins three R&D 100 Awards

IDAHO FALLS — Idaho National Laboratory researchers posted an unparalleled performance this year, earning R&D 100 Awards for three of four nominated technologies during the 2009 international competition.

"These three award-winning technologies demonstrate the breadth of research at INL ranging from specified nanoparticle production for energy application to water quality monitoring and cybersecurity research," said David Hill, INL deputy director for Science and Technology. "While energy remains our principal investigative nature, our researchers are leveraging discoveries for application across many disciplines."

INL achieved its highest percentage ever of nominated technologies chosen for awards, and all three of these technologies have been licensed to companies with whom INL partnered to make the submissions.

These three latest selections boost INL to 41 technologies winning R&D 100 awards in the past 23 years, a selection rate of 28.28 percent since 1986.

The three R&D 100 Award-winning technologies, their research teams and licensed partners for 2009 include:

- Water Sample Concentrator: Automated portable device that concentrates and packages a sample of suspected contaminated water for safe, efficient transport to a qualified analytical laboratory. This technology will help safeguard against pathogen contamination or chemical and biological attacks on water supplies. INL researchers include Michael Carpenter, Lyle Roybal and Paul Tremblay. EPA researchers include H.D. Lindquist and Vicente Gallardo. It has been licensed to Teledyne Isco, Inc. of Lincoln, Neb.
- RFinity Mobile Open-Encryption Platform: An innovation that offers a low-cost, plug-n-play option that enables virtually any wireless telecommunications device to safely store sensitive personal information and perform secure transactions. INL researchers include Steven McCown, Aaron Turner, Kurt Derr, Kenneth Rohde and Troy Moore. McCown and Turner have formed a company called RFinity of Idaho Falls, Idaho, and licensed the technology for commercialization.
- Precision Nanoparticles: A revolutionary technology that efficiently produces nanoparticles in uniform and prescribed sizes (1-100 nanometers) using supercritical fluids. INL researcher Robert Fox was joined by Idaho State University researchers Rene Rodriguez and Joshua Pak in developing the technology. It has been licensed to Precision Nanoparticles, Inc., of Seattle, Wash.

"The Department of Energy's national laboratories are incubators of innovation, and I'm proud they are being recognized once again for their remarkable work," said Energy Secretary Steven Chu. "The cutting-edge research and development being done in our national labs is vital to maintaining America's competitive edge, increasing our nation's energy security, and protecting our environment. I want to thank this year's winners for their work and congratulate them on this award."

"We are very proud our researchers, Bob Fox, Mike Carpenter, Lyle Roybal and Paul Tremblay," said J.W. "Bill" Rogers Jr., associate laboratory director for Energy and Environment. Two of the three winning research teams work in INL's Energy and Environment directorate.

"RFinity is an impressive technological outcome from some of INL's research into cybersecurity," said K.P. Ananth, associate laboratory director for INL's National and Homeland Security directorate.

"People often forget their keys or wallets, but rarely their cell phones. RFinity enables safe, convenient, confident and rapid electronic purchases and personal identification with the same technologies used to secure our nation's secrets," said Steve McCown, RFinity's chief technology officer.

"A bonus for this year is that all three winning INL research technologies have been licensed by companies to commercialize these discoveries and improve American quality of life," said Brent Stacey, director of INL's Technology Deployment directorate. "America's national laboratories are fulfilling their important missions of discovering and commercializing new technologies."

Research team members will be hosted by R&D Magazine in November of this year at a gala dinner and award presentation in Orlando, Fla.

INL is one of the DOE's 10 multiprogram national laboratories. The laboratory performs work in each of the strategic goal areas of DOE: energy, national security, science and environment. INL is the nation's leading center for nuclear energy research and development. Day-to-day management and operation of the laboratory is the responsibility of Battelle Energy Alliance.

Subscribe to RSS feeds for INL news releases and feature stories at www.inl.gov.

-INL- 09-032

News Release Archive